

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2010; month=2; day=5; hr=15; min=34; sec=32; ms=637;]

=====

Reviewer Comments:

1.

E252 Calc# of Seq. differs from actual; 858 seqIds defined;
count=846

210> 847

<211> 26

<212> PRT

<213> Artificial Sequence

Numeric identifier tags are mandatory and must be complete with brackets on both ends. Numeric identifier <210> for SEQ ID # 847 through 858 does not have the necessary bracket, "<", on the left hand side. Please change the existing numeric identifier, "210>", to the correct format, "<210>".

2.

E330 Invalid protein , found in SEQID(846) POS (18)Invalid
Protein:LeU

E330 Invalid protein , found in SEQID(846) POS (18)Invalid
Protein:LeU

210> 857

<211> 29

<212> PRT

<213> Artificial Sequence

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<220>
<221> misc_feature
<222> (2)..(3)
<223> Xaa can be any naturally occurring amino acid
<220>
<221> misc_feature
<222> (5)..(7)
<223> Xaa can be any naturally occurring amino acid
<220>
<221> misc_feature
<222> (9)..(11)
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<220>
<221> misc_feature
<222> (16)..(17)
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<220>
<221> misc_feature
<222> (20)..(22)
<223> Xaa can be any naturally occurring amino acid
<220>
<221> misc_feature
<222> (24)
<223> Xaa can be any naturally occurring amino acid
<220>
<221> misc_feature
<222> (27)..(28)
<223> Xaa can be any naturally occurring amino acid

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* * * * *

```

Trp Xaa Xaa Trp Xaa Xaa Xaa Ile Xaa Xaa Xaa Thr Xaa Xaa Ile Xaa
1           5           10           15
Xaa LeU Ile Xaa Xaa Xaa Gln Xaa Gln Gln Xaa Xaa Asn
          20           25

```

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210> 858
<211> 34
<212> PRT

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<213> Artificial Sequence
<220>
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<222> (2)
<223> Met, Leu, Ile, Glu, Gln, Thr, Arg, or Lys
<220>
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<222> (3)
<223> Glu, Asp, Gln, or Lys
<220>
<221> misc_feature
<222> (5)
<223> Glu, Asp, or Lys
<220>
<221> misc_feature
<222> (6)
<223> Lys, Arg, Glu Gln, Asn and Thr
<220>
<221> misc_feature
<222> (7)
<223> Glu, Leu, Arg, Lys, or Gln
<220>
<221> misc_feature
<222> (9)
<223> Asn, Asp, Ser, Glu, Gln, Lys, Arg, His, Thr, Ile, or Gly
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<221> misc_feature
<222> (10)
<223> Asn, Gln, Asp, Glu, Lys, Ser, Thr, or Tyr
<220>
<221> misc_feature
<222> (11)
<223> Tyr, Phe, His, Ile, Val and Ser
<220>
<221> misc_feature
<222> (13)
<223> Gly, Lys, Arg, His, Asp, Glu, Ser, Thr, Asn and Gln
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<221> misc_feature
<222> (14)
<223> Lys, His , Glu, Gln , Thr, Val, Ile, Leu, Met, Ala, Tyr, Phe, or
Pro

<220>
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<222> (16)
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<222> (22)
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<221> misc_feature
<222> (24)
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<222> (27)
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<220>
<221> misc_feature
<222> (28)
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<222> (30)
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<221> misc_feature
<222> (31)
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<220>

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<221>  misc_feature
<222>  (32)
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<220>
<221>  misc_feature
<222>  (33)
<223>  Leu, Ile, or Tyr
<220>
<221>  misc_feature
<222>  (34)
<223>  Ile, Leu, Met, Gln, Ser, or Tyr
* * * * *
Trp Xaa Xaa Trp Xaa Xaa Xaa Ile Xaa Xaa Xaa Thr Xaa Xaa Ile Xaa
1           5           10           15
Xaa LeU Ile Xaa Xaa Xaa Gln Xaa Gln Gln Xaa Xaa Asn Xaa Xaa Xaa
          20           25           30
Xaa Xaa

```

For SEQ ID # 857 and 858, the sequence rules specify the format of the three letter amino acid designators as "The amino acids in a protein or peptide sequence shall be listed using the three-letter abbreviation with the first letter as an upper case character, as in WIPO Standard ST.25 (1998), Appendix 2, Table 3." The format must follow the pattern "Upper case, Lower case, Lower case". The format used at the position 18 in SEQ ID # 857 and 858 is "Upper case, Lower case, Upper Case", "LeU", this position should be "Leu." Please make all necessary changes.

3.

```

<210>  821
<211>  5
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  Description of Artificial Sequence: Synthetic
        peptide
<220>
<221>  MOD_RES
<222>  (3)
<223>  Sta
<220>

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<221> MOD_RES
<222> (5)
<223> Sta

"Xaa" can only represent a single amino acid or modified amino acid.
"Sta" is not a recognized amino acid or modified amino acid. Please make
all necessary changes.

4.

W213	Artificial or Unknown found in <213> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
E257	Invalid sequence data feature in <221> in SEQ ID (803)
W213	Artificial or Unknown found in <213> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
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E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)
E257	Invalid sequence data feature in <221> in SEQ ID (804)

This error has occurred more than 20 times, will not be displayed

W213	Artificial or Unknown found in <213> in SEQ ID (805)
W213	Artificial or Unknown found in <213> in SEQ ID (806)
W213	Artificial or Unknown found in <213> in SEQ ID (807)
W213	Artificial or Unknown found in <213> in SEQ ID (808)
W213	Artificial or Unknown found in <213> in SEQ ID (809)
W213	Artificial or Unknown found in <213> in SEQ ID (810)
W213	Artificial or Unknown found in <213> in SEQ ID (811)

W213 Artificial or Unknown found in <213> in SEQ ID (812)
W213 Artificial or Unknown found in <213> in SEQ ID (813)
W213 Artificial or Unknown found in <213> in SEQ ID (814)
W213 Artificial or Unknown found in <213> in SEQ ID (815)
W213 Artificial or Unknown found in <213> in SEQ ID (816)
W213 Artificial or Unknown found in <213> in SEQ ID (817)
W213 Artificial or Unknown found in <213> in SEQ ID (818)
W213 Artificial or Unknown found in <213> in SEQ ID (819)
W213 Artificial or Unknown found in <213> in SEQ ID (820)
W213 Artificial or Unknown found in <213> in SEQ ID (821)
W213 Artificial or Unknown found in <213> in SEQ ID (822)

This error has occurred more than 20 times, will not be displayed

The warnings and errors shown above are ok and require no response.

Application No: 10550715 Version No: 1.0

Input Set :

Output Set:

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Started:      2010-01-21 20:20:29.621
Finished:    2010-01-21 20:20:49.869
Elapsed:     0 hr(s) 0 min(s) 20 sec(s) 248 ms
Total Warnings: 56
Total Errors:  69
No. of SeqIDs Defined: 858
Actual SeqID Count: 846

```

[illegible]

Input Set:

Output Set:

Started: 2010-01-21 20:20:29.621
Finished: 2010-01-21 20:20:49.869
Elapsed: 0 hr(s) 0 min(s) 20 sec(s) 248 ms
Total Warnings: 56
Total Errors: 69
No. of SeqIDs Defined: 858
Actual SeqID Count: 846

Error code	Error Description
E 257	Invalid sequence data feature in <221> in SEQ ID (804)
E 257	Invalid sequence data feature in <221> in SEQ ID (804) This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (805)
W 213	Artificial or Unknown found in <213> in SEQ ID (806)
W 213	Artificial or Unknown found in <213> in SEQ ID (807)
W 213	Artificial or Unknown found in <213> in SEQ ID (808)
W 213	Artificial or Unknown found in <213> in SEQ ID (809)
W 213	Artificial or Unknown found in <213> in SEQ ID (810)
W 213	Artificial or Unknown found in <213> in SEQ ID (811)
W 213	Artificial or Unknown found in <213> in SEQ ID (812)
W 213	Artificial or Unknown found in <213> in SEQ ID (813)
W 213	Artificial or Unknown found in <213> in SEQ ID (814)
W 213	Artificial or Unknown found in <213> in SEQ ID (815)
W 213	Artificial or Unknown found in <213> in SEQ ID (816)
W 213	Artificial or Unknown found in <213> in SEQ ID (817)
W 213	Artificial or Unknown found in <213> in SEQ ID (818)
W 213	Artificial or Unknown found in <213> in SEQ ID (819)
W 213	Artificial or Unknown found in <213> in SEQ ID (820)
W 213	Artificial or Unknown found in <213> in SEQ ID (821)
W 213	Artificial or Unknown found in <213> in SEQ ID (822) This error has occurred more than 20 times, will not be displayed
E 330	Invalid protein , found in SEQID(846) POS (18)Invalid Protein:LeU

Input Set:

Output Set:

Started: 2010-01-21 20:20:29.621
Finished: 2010-01-21 20:20:49.869
Elapsed: 0 hr(s) 0 min(s) 20 sec(s) 248 ms
Total Warnings: 56
Total Errors: 69
No. of SeqIDs Defined: 858
Actual SeqID Count: 846

Error code	Error Description
E 330	Invalid protein , found in SEQID(846) POS (18)Invalid Protein:LeU
E 252	Calc# of Seq. differs from actual; 858 seqIds defined; count=846

SEQUENCE LISTING

<110> SILVA, ABELARDO
ERICKSON, JOHN E.
EISSENSTAT, MICHAEL
AFONINA, ELENA
GULNIK, SERGEI

<120> LONG ACTING BIOLOGICALLY ACTIVE CONJUGATES

<130> 00956.8006.US02

<140> 10550715

<141> 2010-01-21

<150> PCT/US04/008847

<151> 2004-03-24

<150> 60/518,892

<151> 2003-11-10

<150> 60/456,952

<151> 2003-03-25

<150> 60/456,472

<151> 2003-03-24

<160> 858

<170> PatentIn Ver. 3.3

<210> 1

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 1

Trp	Met	Lys	Trp	Glu	Arg	Glu	Ile	Asp	Asn	Tyr	Thr	Ser	Tyr	Ile	Tyr
1				5				10						15	

Thr	Leu	Ile	Glu	Glu	Ser	Gln	Asn	Gln	Gln	Glu	Lys	Asn	Glu	Leu	Glu
			20					25						30	

Leu	Leu	Glu
		35

<210> 2

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 2

Trp Leu Gln Trp Asp Lys Glu Ile Asn Asn Tyr Thr Glu Ile Ile Tyr
1 5 10 15

Lys Leu Ile Glu Asp Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 3

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 3

Trp Met Gln Trp Asp Lys Glu Ile Asn Asn Tyr Thr Asn Ile Ile Tyr
1 5 10 15

Arg Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 4

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 4

Trp Thr Gln Trp Asp Arg Glu Ile Ser Asn Tyr Thr Glu Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Lys Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Ala
35

<210> 5

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 5

Trp Met Glu Trp Glu Asn Glu Ile Asn Asn Tyr Thr Gly Ile Ile Tyr
1 5 10 15

Gln Leu Ile Glu Gln Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 6
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 6
Trp Met Gln Trp Glu Lys Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Gly
35

<210> 7
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 7
Trp Met Gln Trp Glu Lys Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Gly
35

<210> 8
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 8
Trp Met Gln Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu

20

25

30

Leu Leu Glu
35

<210> 9

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 9

Trp Met Gln Trp Asp Arg Glu Ile Ser Asn Tyr Thr Glu Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Lys Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Ala
35

<210> 10

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 10

Trp Met Glu Trp Glu Arg Gln Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Gln Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 11

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 11

Trp Met Glu Trp Glu Arg Gln Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Ala Leu Ile Glu Gln Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 12

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 12

Trp Met Glu Trp Glu Arg Gln Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Gln Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 13

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 13

Trp Met Gln Trp Glu Lys Glu Ile Glu Asn Tyr Thr Gly Leu Ile Tyr
1 5 10 15

Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 14

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 14

Trp Met Glu Trp Glu Lys Glu Ile Ser Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 15
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 15
Trp Met Glu Trp Glu Lys Glu Ile Ser Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 16
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 16
Trp Met Glu Trp Glu Lys Glu Ile Ser Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 17
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 17
Trp Met Gln Trp Glu Arg Glu Ile Asp Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Thr
35

<210> 18
<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 18

Trp Met Gln Trp Glu Arg Glu Ile Glu Asn Tyr Thr Asp Glu Ile Tyr
1 5 10 15

Arg Leu Ile Glu Gln Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 19

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 19

Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 20

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 20

Trp Met Glu Trp Glu Arg Glu Ile Arg Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Lys Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 21

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 21

Trp Met Glu Trp Glu Arg Glu Ile Ser Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Lys Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 22

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 22

Trp Met Lys Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Tyr Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 23

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 23

Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Glu
35

<210> 24

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 24

Trp Met Asp Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Gly
35

<210> 25

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 25

Trp Met Gln Trp Glu Arg Glu Ile Glu Asn Tyr Thr Asp Glu Ile Tyr
1 5 10 15

Arg Leu Ile Glu Gln Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 26

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 26

Trp Gln Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Gln Ile Ile Tyr
1 5 10 15

Glu Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Arg Asn Glu Lys Asp
20 25 30

Leu Leu Glu
35

<210> 27

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 27

Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Asp Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Lys Ser Gln Lys Gln Gln Glu Gln Asn Glu Gln Glu

20

25

30

Leu Leu Glu
35

<210> 28

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 28

Trp Met Glu Trp Asp Arg Glu Ile Asn Asn Tyr Thr Ser Leu Ile His
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 29

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 29

Trp Met Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Gln Thr Ile Tyr
1 5 10 15

Asn Leu Ile Glu Lys Ser Gln Ile Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 30

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 30

Trp Met Glu Trp Asp Arg Glu Ile Asp Asn Tyr Thr His Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Gln Gln Glu
20 25 30

Leu Leu Gln
35

<210> 31

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 31

Trp Leu Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Asp Ile Ile Tyr
1 5 10 15

Asn Leu Ile Glu Glu Ser Gln Ile Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Ala
35

<210> 32

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 32

Trp Ile Glu Trp Glu Lys Glu Ile Asn Asn Tyr Thr Glu Leu Ile Tyr
1 5 10 15

Asn Leu Ile Glu Ile Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 33

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 33

Trp Leu Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Glu Ile Ile Tyr
1 5 10 15

Gln Leu Ile Glu Lys Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Met Ala
35

<210> 34
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 34
Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Asp Glu Ile Tyr
1 5 10 15

Arg Leu Ile Glu Gln Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 35
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 35
Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Asp Glu Ile Tyr
1 5 10 15

Arg Leu Ile Glu Gln Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 36
<211> 35
<212> PRT
<213> Human Immunodeficiency Virus

<400> 36
Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 37
<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 37

Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Glu
35

<210> 38

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 38

Trp Met Glu Trp Glu Lys Glu Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Lys Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 39

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 39

Trp Met Glu Trp Glu Lys Glu Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Lys Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 40

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 40

Trp Leu Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Asn Leu Ile Tyr
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 41

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 41

Trp Met Glu Trp Glu Arg Glu Ile Gly Lys Tyr Thr Gly Ile Ile Tyr
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Tyr Gln Gln Glu Lys Asn Glu Lys Glu
20 25 30

Leu Leu Glu
35

<210> 42

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 42

Trp Met Gln Trp Asp Lys Glu Ile Ser Asn Tyr Thr Glu Ile Ile Tyr
1 5 10 15

Lys Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp
20 25 30

Leu Leu Ala
35

<210> 43

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 43

Trp Met Glu Trp Glu Arg Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
20 25 30

Leu Leu Gly
35

<210> 44

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 44

Trp Met Gln Trp Glu Lys Glu Ile Asp Asn Tyr Thr Ser Leu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Leu Asp
20 25 30

Leu Leu Glu
35

<210> 45

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 45

Trp Met Glu Trp Glu Lys Glu Ile Asp Asn Tyr Thr Asn Glu Ile Tyr
1 5 10 15

Thr Leu Ile Glu Lys Ala Gln Asn Gln Gln Glu Lys Asn Glu Leu Glu
20 25 30

Leu Leu Glu
35

<210> 46

<211> 35

<212> PRT

<213> Human Immunodeficiency Virus

<400> 46

Trp Met Glu Trp Glu Lys Glu Ile Ser Asn Tyr Thr Asn Leu Ile Tyr
1 5 10